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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/845,157	05/01/2001	Michael D. Smith	0942.5040001/RWE/MTT	2674
26111	7590	03/31/2005	EXAMINER	
STERNE, KESSLER, GOLDSTEIN & FOX PLLC 1100 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005				FREDMAN, JEFFREY NORMAN
		ART UNIT		PAPER NUMBER

1637

DATE MAILED: 03/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	09/845,157	SMITH ET AL.
	Examiner	Art Unit
	Jeffrey Fredman	1637

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1) Responsive to communication(s) filed on February 3, 2005 .

2a) This action is FINAL.                                    2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4) Claim(s) 2-4,7-29,44-47,51 and 52 is/are pending in the application.

4a) Of the above claim(s) 4,8,9,19-23,25 and 29 is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 2,3,7,10-18,24,26-28,44-47,51 and 52 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.  
 If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
 \* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
 a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

1) Notice of References Cited (PTO-892)                                    4) Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)                            5) Notice of Informal Patent Application (PTO-152)  
 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.                            6) Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Status***

1. Claims 2-4, 7-29, 44-47, 51 and 52 are pending.

Claims 2, 3, 7, 10-18, 24, 26-28, 44-47, 51 and 52 are rejected.

Claims 4, 8, 9, 19-23, 25 and 29 are withdrawn from consideration.

This action is non-final since the Sequence Rules and Drawing issues should have been noted in the previous action and the 112, second paragraph rejection could have been made in the previous action. Further, this will provide Applicant with time to correct these matters.

### ***Sequence Rules***

2. Applicant's amendment necessitated a new review of SEQ ID NO: 8. In that review, it was found that SEQ ID NO: 8 contains an error of duplication of nucleotides 1379-1438, and, consequently, duplication of amino acid sequence between amino acids 121 and 140. This error must be corrected with a new Sequence listing, a new CRF and a new statement that the two are identical.

### ***Drawings***

3. The drawings are objected to because the sequence shown in Figure 8 contains an error of duplication of nucleotides 1379-1438, and, consequently, duplication of amino acid sequence between amino acids 121 and 140. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should

include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Objections***

4. Claims 20, 28 and 47 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim.

Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

Claims 20, 28 and 47 are drawn to MMLV, but claim 2, from which claim 20 ultimately depends, is limited to a polymerase which comprises the specific alterations in SEQ ID NO: 8, which is an element of the claim, limiting the claim to MMLV by structure.

***Claim Rejections - 35 USC § 112, second paragraph***

5. Claims 26 and 27 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is vague and indefinite what these claims comprise since claim 2, from which the claims depend, is now limited to SEQ ID NO: 8, which is the MMLV sequence. Thus, these claims make no sense because SEQ ID NO: 8 is not, for example, the AMV or HIV reverse transcriptase sequence. Therefore, these claims are vague and indefinite since they fail to further limit the parent claim and encompass claim scope not included in the parent claim.

6. Claims 2,3,7,10-18,24,26-28,44-47,51 and 52 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims are indefinite because the sequence is not correct. That is, it is vague and indefinite if Applicant means to claim the MMLV reverse transcriptase or some other reverse transcriptase with the repeated sequence at amino acids 121-140. Correction of the sequence listing and of the Drawings would obviate this rejection.

***Claim Rejections - 35 USC § 102***

7. The rejection of claims under 35 U.S.C. 102(a) and (b) is withdrawn in view of the amendment.

***Claim Rejections - 35 USC § 103***

8. The rejection of claims 44-47, 51 and 52 under 35 U.S.C. 103(a) is withdrawn in view of the amendment.

***Response to Arguments***

9. Applicant's arguments filed February 3, 2005 have been fully considered but they are not persuasive.

Applicant argues that the amendment has overcome all of the issues. This is not entirely correct. Several claims are now rendered indefinite or objected to in view of the amendment. Further, the application does not properly comply with Sequence Rules. Cancellation of these claims and correction of the sequence and Drawings would place this application in condition for allowance.

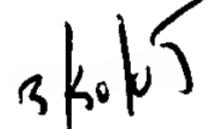
***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey Fredman whose telephone number is (571)272-0742. The examiner can normally be reached on 6:30-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Benzion can be reached on (571)272-0782. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Jeffrey Fredman  
Primary Examiner  
Art Unit 1637

  
J.F.